INTRAVAGINAL TELEMETRIC PROBE

Publication number: AU7043481
Publication date: 1981-11-19
Inventor: ZARTMAN D L
Applicant: UNIV NEW MEXICO
Classification:
- International: ***A01K29/00; A61B5/00; A61B10/00; A61D13/00;*** **A01K29/00; A61B; A61B5/00; A61B10/00; A61D13/00;** (IPC1-7): A61B5/00; A61B10/00; A61D13/00
- European:
Application number: AU19810070434D 19810511
Priority number(s): US19800149250 19800512; US19800194183 19801006

Abstract not available for AU7043481

Vaginal or anal endocavity probe

Publication number: FR2709422
Publication date: 1995-03-10
Inventor: ANDRE MAMBERTI-DIAS
Applicant: MAMBERTI DIAS ANDRE (FR)
Classification:
- International: ***A61B5/0488; A61M23/00; A61N1/05;*** **A61B5/0488; A61M23/00; A61N1/05;** (IPC1-7): A61M23/00; A61B5/0488; A61N1/05
- European: A61B5/0488B; A61N1/05V
Application number: FR19930010580 19930831
Priority number(s): FR19930010580 19930831

Abstract of **FR2709422**

The subject of the present invention is a vaginal or anal endocavity probe. It consists of a vaginal or anal endocavity probe (1) including, in addition to the usual two measuring electrodes (6, 7), a reference electrode (5), a small casing worn by the patient, connected by a cable (2) to the said probe and containing a recording system or a transmitter which transmits the results of the measurements by wireless link to a control apparatus which is itself equipped with a receiver or with a connector making it possible to connect it to the recorder casing. It applies to the medical field and is intended for electromyographic recordings of the vaginal or anal internal musculature.

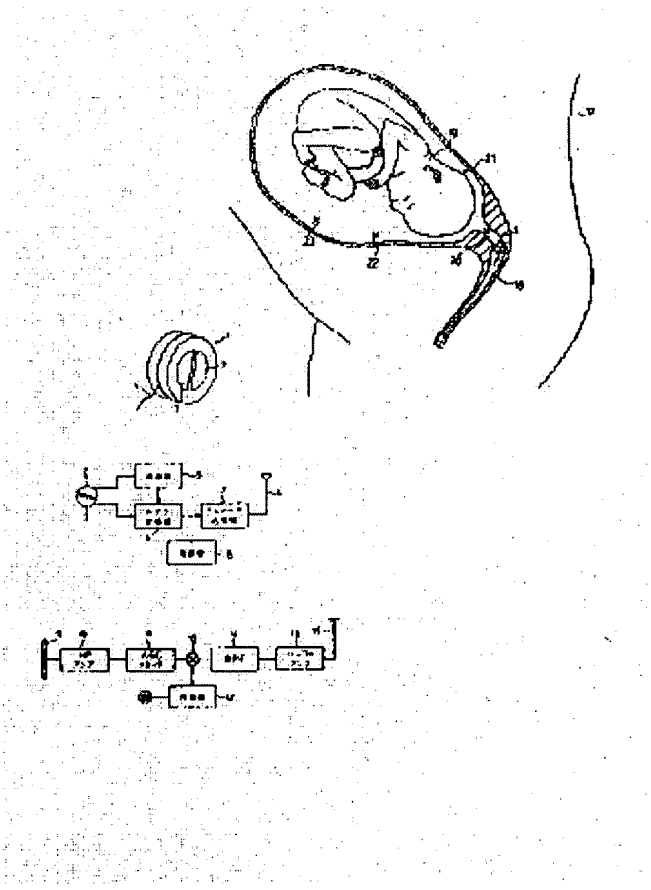
FETUS MONITOR

Publication number: JP1107745
Publication date: 1989-04-25
Inventor: HOGAKI MASANOBU; TAKEUCHI YASUTO
Applicant: YOKOGAWA MEDICAL SYST; HOGAKI MASANOBU
Classification:
- international: ***A61B8/02; A61B5/02; A61B5/0245;*** **A61B8/02; A61B5/02; A61B5/024;** (IPC1-7): A61B5/02; A61B8/02
- European:
Application number: JP19870265058 19871020
Priority number(s): JP19870265058 19871020

Report a data error here

Abstract of **JP1107745**

PURPOSE:To obtain an undisturbed signal continuously even when an expectant mother moves on foot, etc., by installing a supersonic probe deep in the vagina of the expectant mother in a manner that the ultrasonic probe transmits and receives a beam of supersonic waves in a direction almost parallel to the minor axis of the probe and that the plane of the probe which transmits and receives supersonic waves faces the advance part of a subject fetus. CONSTITUTION:A supersonic probe 1 is installed deep in the vagina 18 of an expectant mother 17 with the plane of the probe transmitting and receiving ultrasonic waves (vibrators 2 and 3) faced to the advance part of a subject fetus 19. The advance part of the subject fetus 19 is irradiated with CW supersonic waves transmitted by the vibrator 2, and supersonic waves containing a blood stream component of basilar artery or carotid artery are received by the vibrator 3 and given to a Doppler reception part 6. Output of the Doppler reception part 6 turns into a pulsating Doppler shift signal that has its lower band sufficiently cut, is subjected to frequency modulation in a telemeter transmission part 7 and is sent out from an antenna 4. Radio waves from the mother (antenna 4) are received by a bar antenna 9, demodulated in a relay circuit, and sent out from an antenna 15 after amplification. Radio waves from the antenna 15 are received by an antenna of the main body of the title equipment to be continuously recorded, and a heart rate of the fetus of the expectant mother is continuously monitored.



[File 349] **PCT FULLTEXT** 1979-2007/UB=20070322UT=20070315
[File 348] **EUROPEAN PATENTS** 1978-2007/ 200708

Set	Items	Description
S1	35004	S VAGINA? OR INTRAVAGINA?
S2	172200	S PROBE OR PROBES
S3	130172	S TELEMET? OR WIRELESS
S4	272	S S1(5N)S2
S5	**1**	**S S4(20N)S3**
S6	5	S S1(S)S2(S)S3
S7	**4**	**S S6 NOT S5**
S8	3	S S1/TI AND S2/TI AND S3
S9	**2**	**S S8 NOT S6**

5/3K/1 (Item 1 from file: 349)
PCT FULLTEXT

00559657
VAGINAL PROBE AND METHOD
SONDE VAGINALE ET PROCEDE
Patent Applicant/Patent Assignee:
MEDOC LTD;
GAFNI Ehud;
COHEN Aharon;

	Country	Number	Kind	Date
Patent	WO	200023030	A1	20000427
Application	WO	99IL555		19991021
Priorities	IL	126723		19981022

English Abstract:
A **vaginal probe**, and method of use is disclosed for stimulation of the nerves of the **vagina** with the purpose of testing their reaction to stimuli in the hope of defining, and treating sexual dysfunction in women. One embodiment of the invention (20) includes a shaft (22) adapted to be inserted into the genetalia of a human female. The shaft (22) includes a stop (24), presented as a thickening of the shaft (22). The **probe** (20) includes at least one stimulation area (26, 28) defined on a portion of the shaft (22) so that only a selected portion of the genetalia is stimulated. The **shaft (22) may have sensors for measuring the reaction of the nerves to stimulation, and the stimulation areas (26, 28) may stimulate the nerves of the vagina using temperature, vibration, electricity, and/or pressure.**
Detailed Description:
...performs a similar function.
In an alternative embodiment, **the probe may be a completely insertable probe which is inserted in the vagina without an external base**. Possibly, a wire connects the **probe** to external equipment. **Alternatively, the probe may be wireless**, with an internal power source. Such a 14 **wireless probe** is also useful in an...
...In a preferred embodiment of the invention, a **probe**, especially a **wireless probe** is left in the **vagina** for a considerable period of time, for example an hour, overnight or several days...

7/3K/4 (Item 1 from file: 348)
EUROPEAN PATENTS

00344097
Device for telemetering living tissue impedance by radio means.
Vorrichtung zur drahtlosen Ubermittlung der Impedanz von lebendem Gewebe.

Appareil de **telemetrie** sans fils destine a la mesure de l'impedance de tissus vivants.

Patent Assignee:
STATE OF ISRAEL-MINISTRY OF AGRICULTURE; (731911)
Agricultural Research Organization P.O. Box 6; Bet Dagan; (IL)
(applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
YEDA RESEARCH & DEVELOPMENT COMPANY, LIMITED; (688030)
P.O. Box 95; Rehovot 76100; (IL)
(applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
Inventor:
Fischler, Henryk
; deceased; (IL)
Lipkin, Ziv
4 Kipnes Street; Rehovot; (IL)
Aizinbud, Eliezer
35 Kaplinsky Street; Rishon Lezion; (IL)
Lehrer, Rami A.
17 Spinoza Street; Rehovot; (IL)
Tadmor, Amnon
4 Iris Street; Kiron; (IL)
Nachshon, Aharon
14 Harimon Street; Ramat Hasharon; (IL)
Legal Representative:
Kraus, Walter, Dr. et al (7061)
Patentanwalte Kraus, Weisert & Partner Thomas-Wimmer-Ring 15; D-8000 Munchen 22; (DE)

	Country	Number	Kind	Date	
Patent	EP	344770	A1	19891206	(Basic)
Application	EP	89109929		19890601	
Priorities	IL	86587		19880601	

Designated States:
AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
LU; NL; SE;
International Patent Class (V7): A61B-005/05; A61B-005/00; **Abstract** EP 344770 A1
Apparatus for measuring in vivo tissue impedance comprising: means (10) to be implanted into the body tissue (12) for sensing the impedance thereof and for providing an output signal corresponding to the sensed impedance to a remote location. receiver means (62, 64, 66, 68) located at the remote location for receiving the output signal and means (80) associated with the receiver for displaying the measured impedance value.
Abstract Word Count: 71

Type	Pub. Date	Kind	Text

Publication:English
Procedural: English
Application:English

Available Text	Language	Update	Word Count
CLAIMS A	(English)		1163
SPEC A	(English)		3889
Total Word Count (Document A) 5052			
Total Word Count (Document B) 0			
Total Word Count (All Documents) 5052			

Specification: ...device for the determination of the electrical conductivity of body fluids including **an encapsulated radio probe sensor pinned in the lumen of the vagina** of a cow and containing a storage unit for measured data, a telecommand receiver and a **telemetric** transmitter for transmitting an average value of data measured.

The respective **telemetry** devices disclosed in the above-mentioned U.K. and German patents are characterized by a number of disadvantages, among which is that as the **probes** for measuring oestrus are placed within the **vaginal** lumen, they must be removed before

artificial insemination can be carried out. Furthermore, the prolonged attachment of the device to the sensitive **vaginal** mucosa causes irritation and inflammation thereof. In the field of livestock identification, various methods exist...

9/3K/1 (Item 1 from file: 349)
PCT FULLTEXT

00736960
VAGINAL PROBE HAVING AN IMPROVED SENSOR ARRAY AND METHOD OF USING SAME
SONDE **VAGINALE** POURVUE D'UN RESEAU DE CAPTEURS AMELIORE ET METHODE D'UTILISATION DE CELLE-CI
VAGINAL PROBE HAVING AN IMPROVED SENSOR ARRAY AND METHOD OF USING SAME
SONDE **VAGINALE** POURVUE D'UN RESEAU DE CAPTEURS AMELIORE ET METHODE D'UTILISATION DE CELLE-CI
Patent Applicant/Inventor:
COULSON Richard
52 Power Street, Toronto, Ontario M5A 3A6; CA; CA(Residence); CA(Nationality); (Designated only for: US)
NAKAMURA Kaerynne
833 Logan Avenue, Toronto, Ontario M4K 3E2; CA; CA(Residence); CA(Nationality); (Designated only for: US)
Legal Representative:
RICHES McKENZIE & HERBERT
Suite 2900, 2 Bloor Street East, Toronto, Ontario M4W 3J5; CA;

	Country	Number	Kind	Date
Patent	WO	200049947	A1	20000831
Application	WO	99CA877		19990923
Priorities	US	99257201		19990225

English Abstract:
A **probe** (10) used to determine different possible body conditions of a human or animal subject includes an elongated insertable portion which is adapted for use orally, anally or **vaginal**ly, and along which are provided a number of biosensors (42, 44, 46, 48, 50, 52) and/or temperature sensors (36). The elongated portion is contoured so as to have a complementary shape to the physiology of the user's mouth, anus or **vagina** to ensure good contact between the **probe** sensors and the subject's body fluids or tissues. At least some of the sensors are positioned within a channel or trough which extends along the insertable portion of the **probe** and which is sized to collect body fluids from the subject therein. Preferably the channel is defined by a pair of spaced apart projecting ribs with fluid grooves formed in the elongated portion to assist in directing body fluids towards the channel and sensors. In use, once the **probe** is inserted, body fluids will tend to collect in the channel ensuring that the sensors therein are emersed in the fluid, eliminating air pockets and ensuring more accurate biosensor readings.
Detailed Description:
...an external computer by means of either a connecting cable and interface port or by **wireless** transmitter and receiver.
The insertable end portion of the **probe** is configured to ensure good...is not so limited. If desired, sensed data from the **probe** could be sent by **wireless** transmission to a personal computer or the like.
While the preferred embodiment describes the **probe**...

9/3K/2 (Item 1 from file: 348)
EUROPEAN PATENTS

00630750

PROCESS AND MEASUREMENT PROBE FOR MEASURING THE ELECTRICAL CONDUCTIVITY OF CERVICAL AND/OR VAGINAL MUCUS

VERFAHREN ZUR MESSUNG DER ELEKTRISCHEN LEITFAHIGKEIT VON ZERVICAL- UND/ODER **VAGINALSCHLEIM**, SOWIE HIERBEI VERWANDTE MESSONDE

PROCEDE ET SONDE DE MESURE DE LA CONDUCTIVITE ELECTRIQUE DE MUCUS CERVICAL ET/OU **VAGINAL**

PROCESS AND MEASUREMENT **PROBE** FOR MEASURING THE ELECTRICAL CONDUCTIVITY OF CERVICAL AND/OR **VAGINAL** MUCUS

VERFAHREN ZUR MESSUNG DER ELEKTRISCHEN LEITFAHIGKEIT VON ZERVICAL- UND/ODER **VAGINALSCHLEIM**, SOWIE HIERBEI VERWANDTE MESSONDE

PROCEDE ET SONDE DE MESURE DE LA CONDUCTIVITE ELECTRIQUE DE MUCUS CERVICAL ET/OU **VAGINAL**

Patent Assignee:

Rheintechnik Weiland & Kaspar GmbH & Co KG .Maschinenfabrik. Herstellung und Vertrieb von elektronischen, medizinischen; (231272)

und tiermedizinischen Artikeln, Hellenpfad 2-4; 56170 Bendorf/Rhein; (DE)

(applicant designated states: CH;DE;ES;FR;GB;IE;IT;LI;NL)

Inventor:

WEILAND, Werner

Koblenz-Olper-Strasse 172; D-5413 Bendorf-Sayn; (DE)

	Country	Number	Kind	Date	
Patent	EP	613348	A1	19940907	(Basic)
	EP	613348	B1	19980121	
	WO	9309716		19930527	
Application	EP	92923288		19921110	
	WO	92EP2573		19921110	
Priorities	DE	4137303		19911113	

Specification: ...Lesegerat

bestehend aus: Empfangsteil (induktiv bzw. HF), (mu)-Prozessor, Langzeitspeicher, Ein-Ausgabeeinheiten

Sensor, ASIC und **Telemetrietrecke** sollten miniaturisiert aufgebaut sein, damit eine Einfuhrung in die **Vagina** des Rindes moglich ist. Bei...

[File 350] **Derwent WPIX** 1963-2006/UD=200720
[File 347] **JAPIO** Dec 1976-2006/Nov(Updated 070228)

Set	Items	Description
S1	11	S AU=(HOCHMAN J? OR HOCHMAN, J?)
S2	3	S AU=(SARKIS G? OR SARKIS, G?)
S3	**1**	**S S1 AND S2**
S4	**12**	**S S1:S2 NOT S3**

3/5/1 (Item 1 from file: 350)
Derwent WPIX

0013550956 *Drawing available*
WPI Acc no: 2003-644872/200361
XRPX Acc No: N2003-512980

Vaginal conditions transducing and stimulating method, has combination probe and transceiver with two-way wireless communication unit providing a wireless signal feedback loop between probe and controller

Patent Assignee: ATHENA FEMINIME TECHNOLOGIES INC (ATHE-N); ATHENA FEMININE TECHNOLOGIES INC (ATHE-N); BIOSYSTEM SOLUTIONS (BIOS-N)
Inventor: GITT B; **HOCHMAN J S**; **SARKIS G**
Patent Family (10 patents, 100 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030083590	A1	20030501	US 20017393	A	20011026	200361	B
WO 2004037083	A1	20040506	WO 2002US34245	A	20021024	200431	E
BR 200213537	A	20040831	BR 200213537	A	20021024	200460	E
			WO 2002US34245	A	20021024		
AU 2002348070	A1	20040513	AU 2002348070	A	20021024	200468	NCE
			WO 2002US34245	A	20021024		
EP 1487335	A1	20041222	EP 2002784285	A	20021024	200501	E
			WO 2002US34245	A	20021024		
KR 2004101190	A	20041202	KR 2004706163	A	20040424	200525	E
CN 1607925	A	20050420	CN 2002825958	A	20021024	200555	E
JP 2006503640	W	20060202	WO 2002US34245	A	20021024	200611	NCE
			JP 2004546643	A	20021024		
IN 200400857	P4	20060113	JP 2003402168	A	20031201	200615	NCE
			IN 2004CN857	A	20040423		
IN 200400858	P4	20060113	JP 2001333252	A	20011030	200615	NCE
			IN 2004CN858	A	20040423		

Priority Applications (no., kind, date): IN 2004CN858 A 20040423; IN 2004CN857 A 20040423; JP 2004546643 A 20021024; AU 2002348070 A 20021024; US 2001965193 A 20010926; US 20017393 A 20011026

Alerting Abstract US A1

NOVELTY - The system has an intravaginally containable combination probe and transceiver unit (21). The latter unit has a 2-way wireless unit (36, 36) for transmitting transduced information and for receiving control and programming signals. A combination controller (22) and transceiver is provided for sending and receiving signals via probe. An interactive/closed signal feedback loop is there between controller and probe.

DESCRIPTION - A transceiver is also provided with a sensor unit for sensing vaginal conditions, delivering and stimulating perineal musculature and nerves. An INDEPENDENT CLAIM is also included for a method of transducing vaginal conditions, affecting vaginal or body conditions and stimulating perineal musculature and nerves.

USE - Used for transducing vaginal conditions, affecting vaginal or body conditions, and stimulating perineal musculature and nerves.

ADVANTAGE - The system allows the transducing of vaginal conditions, stimulation of perineal musculature and nerves in a wireless manner. A real time wireless feedback loop can be provided between the controller and the probe and/or external devices, networks

and databases.
DESCRIPTION OF DRAWINGS - The drawing shows a micro circuitry of the system.
21 Combination probe and transceiver unit
22 Controller
36,36 2-way wireless communication unit.
Class Codes
International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-005/00; A61B-005/103; C05F-009/02			Main		"Version 7"
A61N-0001/36	A	I	F	B	20060101

US Classification, Issued: 600549000, 600551000, 600591000
DWPI Class: S05; W05; P31; P34
Manual Codes (EPI/S-X): S05-A04; W05-D08C1

4/5/8 (Item 8 from file: 350)
Derwent WPIX

0003130154
WPI Acc no: 1984-225369/198436
Intravaginal myostimulatory device incorporating biofeedback techniques - for development training and rehabilitation of pubococcygeal and related perineal musculature of female
Patent Assignee: HOCHMAN J S (HOCH-I)
Inventor: **HOCHMAN J S**
Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1984003211	A	19840830	WO 1984US269	A	19840227	198436	B
US 4515167	A	19850507	US 1983470196	A	19830228	198521	E
JP 60500848	W	19850606	JP 1984501312	A	19840227	198529	E

Priority Applications (no., kind, date): US 1983470196 A 19830228
Alerting Abstract WO A
Stimulation is achieved by a 2.5 to 3.0 volt potential applied as pulses through the electrodes (11,12) with the mark-space ratio of the pulses being adjustable by the programming switches (16), in combination with a closed loop feedback circuit, to produce the desired level of stimulation.
A pressure sensing diaphragm (17) set into the metal electrode section (11) provides measurement of the muscle response to simulation. Cervical secretion, viscosity and temp. transducers (18,19) are coupled to internal integrated measurement and telemetry circuitry with an FM oscillator generating a signal to alert the wearer of the onset of ovulation and the probable fertility period.
USE/ADVANTAGE - Provides remedial treatment for certain female vaginal disorders or disfunctions. Can be worn for long periods in complete privacy and without discomfort.
Class Codes
International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-010/00			Main		"Version 7"
A61B-005/10; A61N-001/36			Secondary		"Version 7

US Classification, Issued: 128736000, 128738000, 128778000, 128788000
DWPI Class: S05; P31; P34
Manual Codes (EPI/S-X): S05-A04; S05-D01C5

[File 155] **MEDLINE(R)** 1950-2007/Mar 23
[File 5] **Biosis Previews(R)** 1926-2007/Mar W3
[File 73] **EMBASE** 1974-2007/Mar 27
[File 35] **Dissertation Abs Online** 1861-2007/Feb
[File 65] **Inside Conferences** 1993-2007/Mar 26
[File 2] **INSPEC** 1898-2007/Mar W3

Set	Items	Description
S1	982	S AU=(HOCHMAN J? OR HOCHMAN, J?)
S2	70	S AU=(SARKIS G? OR SARKIS, G?)
S3	0	S S1 AND S2
S4	204550	S VAGINA? OR INTRAVAGINA?
S5	**1**	**S S1:S2 AND S4**
S6	417	S PROBE? ? AND WIRELESS
S7	3	S S1:S2 AND S6
S8	**3**	**S S7 NOT S5**

5/7/1 (Item 1 from file: 155)
Fulltext available through: USPTO Full Text Retrieval Options
MEDLINE(R)

04853138 **PMID:** 366679
Relaxin.
Schwabe C; Steinetz B; Weiss G; Segaloff A; McDonald J K; O'Byrne E; **Hochman J**; Carriere B; Goldsmith L
Recent progress in hormone research (UNITED STATES) 1978 , 34 p123-211 , **ISSN:** 0079-9963--Print **Journal Code:** 0404471
Publishing Model Print
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
(188 Refs.)
Record Date Created: 19790324
Record Date Completed: 19790324

8/9/1 (Item 1 from file: 155)
Fulltext available through: custom link USPTO Full Text Retrieval Options
MEDLINE(R)

20095295 **PMID:** 16205507
Tolerance and reliability of wireless pH monitoring in children.
Hochman Jay A; Favaloro-Sabatier Jennifer
Children's Center for Digestive Health Care, Atlanta, Georgia 30342, USA. jhochman@ccdhc.org
Journal of pediatric gastroenterology and nutrition (United States) Oct 2005 , 41 (4) p411-5 , **ISSN:** 0277-2116--Print **Journal Code:** 8211545
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
OBJECTIVES: The purpose of this study was to determine whether the placement of a **wireless** capsule pH monitoring system improved the reproducibility and patient comfort of pH **probe** studies in children. METHODS: The records of 50 children who underwent **wireless** pH monitoring were retrospectively reviewed. Among this group, 44 children (27 males and

17 females) met inclusion criteria. The average age was 11.8 years, with a range from 6 years to 19 years. Each of these patients had a capsule placed 6 cm above the squamocolumnar junction and underwent pH telemetry for 2 days. In addition, 38 of the 44 families were contacted for follow-up to determine the tolerability of the catheter-free monitoring. RESULTS: Data analysis revealed that the overall reproducibility of a single 24 hour period was 77%. Studies were considered reproducible if the reflux index was normal (pH <4 for less than 5% of study period) or abnormal on both study days. Using McNemar's exact test, we found no significant difference between the two days (P = 0.11). Ten of 44 patients had conflicting results on day 1 compared with results on day 2. The majority (68%) of patients reported some degree of discomfort during the study; however, this pain was generally mild. Ninety-five percent of parents would be willing to have their child undergo pH monitoring in the future with the **wireless** pH monitoring. CONCLUSIONS: Catheter-free prolonged esophageal pH monitoring is feasible in children older than 6 years of age. A lack of consistent reproducibility in sequential 24 hour recordings with this technique concurs with findings using the conventional catheter methodologies. The catheter-free system is often associated with discomfort during the study, but these symptoms were generally well tolerated.

Tags: Female; Male

Descriptors: *Esophageal pH Monitoring; *Gastroesophageal Reflux--diagnosis--DI; *Telemetry ; Adolescent; Adult; Capsules; Child; Esophageal pH Monitoring--standards--ST ; Humans; Monitoring, Ambulatory; Reproducibility of Results; Retrospective Studies

CAS Registry No.: 0 (Capsules)

Record Date Created: 20051005

Record Date Completed: 20060313